FIG. 1

FIG. 2

FIG. 3

```
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified">
<xsd:element name="PRESERVATION_CONTENT">
  <xsd:complexType>
    <xsd:sequence>
      <xsd:element name="PRESERVATION_RECORD_INDEX" minOccurs="0" maxOccurs="unbounded">
        <xsd:complexType>
          <xsd:sequence>
            <xsd:element name="LOGICAL">
              <xsd:complexType>
                <xsd:sequence>
                  <xsd:element name="FILE_NAME" type="xsd:string"/>
                  <xsd:element name="FILE_TYPE" type="xsd:string" minOccurs="0"/>
                  <xsd:element name="OWNERSHIP" type="xsd:string" minOccurs="0"/>
                  <xsd:element name="DATE_TIME_PRESERVED" type="xsd:dateTime"/>
                  <xsd:element name="EXPIRATION_DATE" type="xsd:dateTime" minOccurs="0"/>
                  <xsd:element name="SOURCE_IDENTIFIER" type="xsd:string"/>
                  <xsd:element name="ORIGINATING_SOFTWARE" minOccurs="0">
                    <xsd:complexType>
                      <xsd:sequence>
                        <xsd:element name="NAME" type="xsd:string"/>
                      </xsd:sequence>
                      <xsd:attribute name="VERSION" type="xsd:decimal" use="optional"/>
                    </xsd:complexType>
                  </xsd:element>
                  <xsd:element name="SCANNER_PERIPHERAL" minOccurs="0">
                    <xsd:complexType>
                      <xsd:sequence>
                        <xsd:element name="MANUFACTURE" type="xsd:string"/>
```

FIG. 4a

FIG. 4a
FIG. 4b

```
<xsd:element name="MODEL" type="xsd:string"/>
    </xsd:sequence>
  </xsd:complexType>
</xsd:element>
        </xsd:sequence>
      </xsd:complexType>
</xsd:element>
<xsd:element name="PHYSICAL">
  <xsd:complexType>
    <xsd:sequence>
      <xsd:element name="FILE_SIZE" type="xsd:double"/>
      <xsd:element name="ROLE_NUMBER" type="xsd:string"/>
      <xsd:element name="FRAME_NUMBER" type="xsd:unsignedLong"/>
      <xsd:element name="FRAME_ASSOCIATION" type="xsd:string"/>
    </xsd:sequence>
  </xsd:complexType>
</xsd:element>
    </xsd:sequence>
    <xsd:attribute name="Unique_ID" type="xsd:string"/>
  </xsd:complexType>
</xsd:element>
    </xsd:sequence>
  </xsd:complexType>
</xsd:element>
</xsd:schema>
```

FIG. 4b

```
<?xml version="1.0" encoding="UTF-8"?>
<PRESERVATION_CONTENT xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="C:\PreservationXML\Preservation_Index.xsd">
<PRESERVATION_RECORD_INDEX Unique_ID="6d85c7f291296a49df987680b271c5b9">
  <LOGICAL>
    <FILE_NAME>Court record 7-528-257.tif</FILE_NAME>
    <FILE_TYPE>TIFF 6.0</FILE_TYPE>
    <OWNERSHIP>Eastman Kodak Company</OWNERSHIP>
    <DATE_TIME_PRESERVED>2001-04-19T13:20:00.000-05:00</DATE_TIME_PRESERVED>
    <EXPIRATION_DATE>2021-04-19T13:20:00.000-05:00</EXPIRATION_DATE>
    <SOURCE_IDENTIFIER>Scanner</SOURCE_IDENTIFIER>
    <ORIGINATING_SOFTWARE VERSION="2.02">
      <NAME>Preservation Record Management Prototype</NAME>
    </ORIGINATING_SOFTWARE>
    <SCANNER_PERIPHERAL>
      <MANUFACTURE>Eastman Kodak</MANUFACTURE>
      <MODEL>HR200</MODEL>
    </SCANNER_PERIPHERAL>
  </LOGICAL>
  <PHYSICAL>
    <FILE_SIZE>156829</FILE_SIZE>
    <ROLE_NUMBER>6B29FC40-CA47-1067-B31D-00DD010662DA</ROLE_NUMBER>
    <FRAME_NUMBER>7521</FRAME_NUMBER>
    <FRAME_ASSOCIATION>1 of 1</FRAME_ASSOCIATION>
  </PHYSICAL>
</PRESERVATION_RECORD_INDEX>
</PRESERVATION_CONTENT>
```

FIG.5

BINARY STORAGE HARDWARE

206

208

BINARY STORAGE MEDIA

CONVENTIONAL DIGITAL
STORAGE/ARCHIVING SYSTEM

DIGITAL DATA

MACHINE-ONLY READABILITY

CPU

200

OPERATING SYSTEM

APPLICATION

204

202

FIG. 6
(PRIOR ART)

FIG. 7

```
<FRAME_INDEX ID="6d85c7f291296a49df987680b271c5b9">
    <LOGICAL>
        <FILE_NAME>Court record 7-528-257.tif</FILE_NAME>
        <FILE_TYPE>TIFF 6.0</FILE_TYPE>
    </LOGICAL>
    <PHYSICAL>
        <ROLE_NUMBER>6B29FC40-CA47-1067-B31D-00DD010662DA</ROLE_NUMBER>
        <FRAME_NUMBER>7521</FRAME_NUMBER>
        <FRAME_ASSOCIATION>1 of 1</FRAME_ASSOCIATION>
    </PHYSICAL>
</FRAME_INDEX>
<FRAME_INDEX ID="8f91d9a180187b38eg796689c382b8g7">
    <LOGICAL>
        <FILE_NAME>Court record 5-128-257.tif</FILE_NAME>
        <FILE_TYPE>TIFF 6.0</FILE_TYPE>
    </LOGICAL>
    <PHYSICAL>
        <ROLE_NUMBER>6B29FC40-CA47-1067-B31D-00DD010662DA</ROLE_NUMBER>
        <FRAME_NUMBER>7522</FRAME_NUMBER>
        <FRAME_ASSOCIATION>1 of 1</FRAME_ASSOCIATION>
    </PHYSICAL>
</FRAME_INDEX>
<FRAME_INDEX ID="9f73r5f290265r28wx607793y222c6w4">
    <LOGICAL>
        <FILE_NAME>Court record 5-128-258.tif</FILE_NAME>
        <FILE_TYPE>TIFF 6.0</FILE_TYPE>
    </LOGICAL>
    <PHYSICAL>
        <ROLE_NUMBER>6B29FC40-CA47-1067-B31D-00DD010662DA</ROLE_NUMBER>
        <FRAME_NUMBER>7523</FRAME_NUMBER>
        <FRAME_ASSOCIATION>1 of 1</FRAME_ASSOCIATION>
    </PHYSICAL>
</FRAME_INDEX>
```
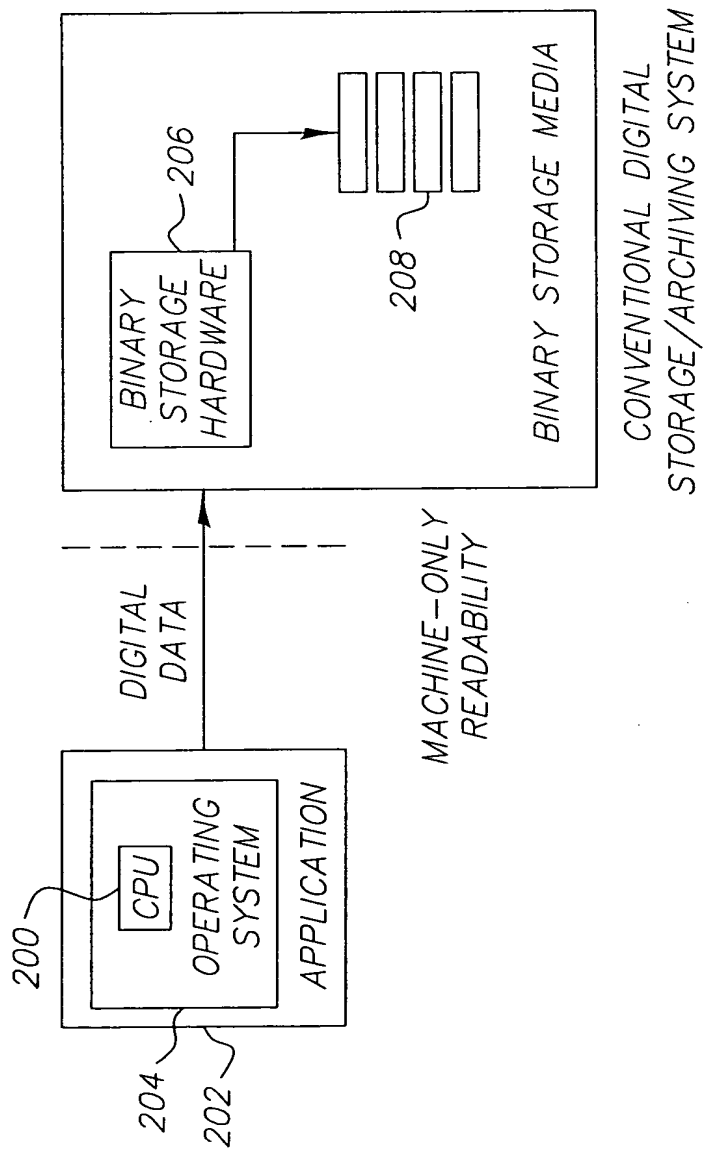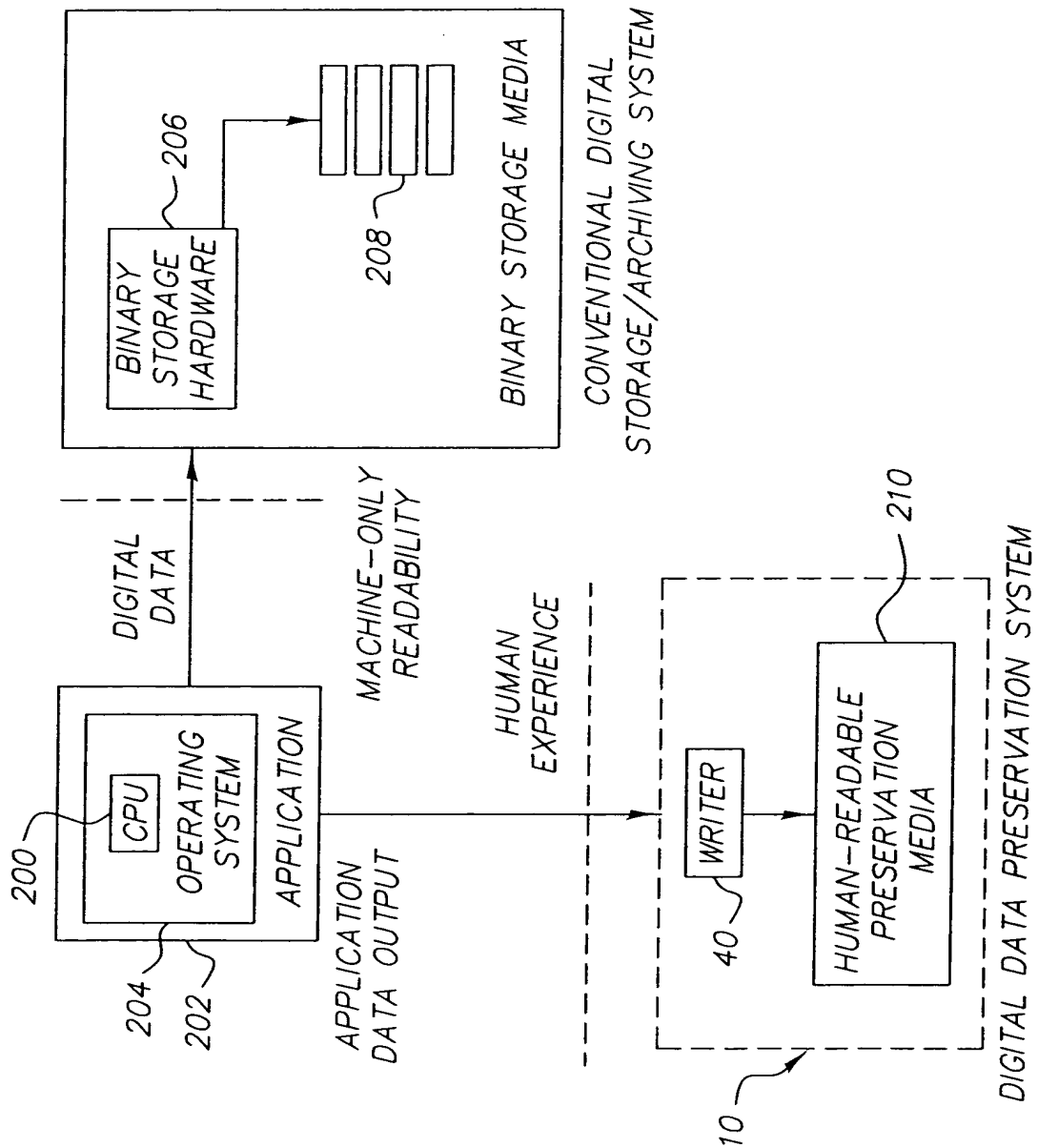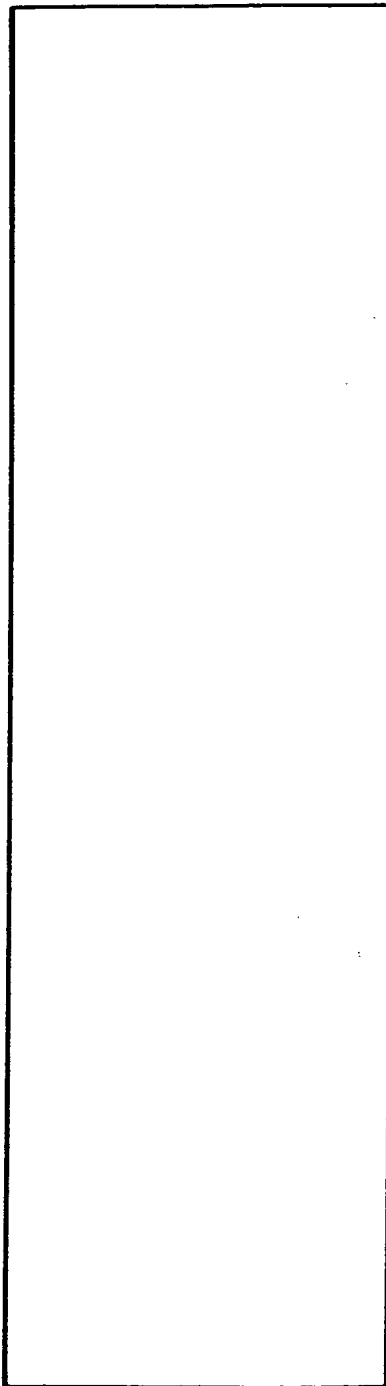
FIG. 8a

<FRAME_INDEX ID="6d85c7f291296a49d987680b271c5b9">
    <LOGICAL>
        <FILE_NAME>Court record 7-528-257.tif</FILE_NAME>
        <FILE_TYPE>TIFF 6.0</FILE_TYPE>
    </LOGICAL>
    <PHYSICAL>
        <ROLE_NUMBER>6B29FC40-CA47-1067-B31D-00DD010662DA</ROLE_NUMBER>
        <FRAME_NUMBER>7521</FRAME_NUMBER>
        <FRAME_ASSOCIATION>1 of 1</FRAME_ASSOCIATION>
    </PHYSICAL>
</FRAME_INDEX>

<FRAME_INDEX ID="9f73r5t290265r28wx607793y222c6w4">
    <LOGICAL>
        <FILE_NAME>Court record 5-128-258.tif</FILE_NAME>
        <FILE_TYPE>TIFF 6.0</FILE_TYPE>
    </LOGICAL>
    <PHYSICAL>
        <ROLE_NUMBER>6B29FC40-CA47-1067-B31D-00DD010662DA</ROLE NUMBER>
        <FRAME_NUMBER>7523</FRAME_NUMBER>
        <FRAME_ASSOCIATION>1 of 1</FRAME_ASSOCIATION>
    </PHYSICAL>
</FRAME_INDEX>

FIG. 8b